

In the claims:

Cancel claim 29 without prejudice.

Amend claim 1, 3-5, 8, 9, 12-14, 16, 20-22, 24, 27, 28, 30, and 31 as follows:

-- 1. A method for cultivation of filamentous fungi comprising the steps of:

- 12 (a) preparing a medium for submerged culture comprising a nutritional solid substrate that receives said filamentous fungi; and
- (b) inoculating said medium with said filamentous fungi in a bioreactor to carry out fermentation wherein the mycelia of said filamentous fungi are attached to said nutritional solid substrate.

13 3. The method as claimed in claim 1, wherein said nutritional solid substrate is a carbohydrate.

4. The method as claimed in claim 3, wherein said carbohydrate is grain.

5. The method as claimed in claim 4, further comprising the steps of husking, cooking and sterilizing said grain before adding to said medium.

14 8. The method as claimed in claim 7, wherein the culturing comprises:

- (1) inoculating said filamentous fungi from a stock culture to a new agar plate and incubating in an incubator for 5 to 7 days;
- (2) washing spores and mycelia grown on said plate with sterile water; and
- (3) cultivating for about 36 to 48 hours said spores and mycelia in a medium comprising a nutritional solid substrate by shaking to form a culture.

15 9. The method as claimed in claim 1, wherein said bioreactor is a pneumatic bioreactor.

12. The method as claimed in claim 11, wherein the medium of the batch comprises a nitrogen source and a nutritional solid substrate.

13. A method for cultivation of the *Monascus* species comprising the steps of:

- (a) preparing a medium for submerged culture comprising a grain particle that receives said *Monascus* species; and
- (b) inoculating said medium with said *Monascus* species in a bioreactor to carry out fermentation wherein the mycelia of said *Monascus* species are attached to said grain particle.

14. The method as claimed in claim 13, further comprising the steps of husking, cooking and sterilizing said grain particle before adding to said medium.

16. The method as claimed in claim 15, wherein the culturing comprises:

- (1) inoculating said *Monascus* species from a stock culture to a new agar plate and incubating in an incubator for 5 to 7 days;
- (2) washing spores and mycelia grown on said plate with sterile water; and
- (3) cultivating for about 36 to 48 hours said spores and mycelia in a medium comprising a grain particle by shaking, to form a culture.

20. The method as claimed in claim 19, wherein the medium of the batch comprises a nitrogen source and a grain particle.

21. A method for producing metabolites from cultivation of the *Monascus* species comprising the steps of:

- (a) preparing a medium for submerged culture comprising a grain particle that receives said *Monascus* species; and
- (b) inoculating said medium with said *Monascus* species in a bioreactor to carry out fermentation wherein the mycelia of said *Monascus* species are attached to said grain particle.

D12 22. The method as claimed in claim 21, further comprising the steps of husking, cooking and sterilizing said grain particle before adding to said medium.

24. The method as claimed in claim 23, wherein the culturing comprises:

- D13 (1) inoculating said *Monascus* species from a stock culture to a new agar plate and incubating in an incubator for 5 to 7 days;
(2) washing spores and mycelia grown on said plate with sterile water;
(3) cultivating for about 36 to 48 hours said spores and mycelia in a medium comprising a grain particle by shaking, to form a culture.

D14 27. The method as claimed in claim 21, further comprising cultivating said *Monascus* species using the fed-batch process.

D15 28. The method as claimed in claim 27, wherein the medium of the batch comprises a nitrogen source and a grain particle.

30. The method as claimed in claim 13, wherein the grain particle is rice.

D16 31. The method as claimed in claim 21, wherein the gain particle is rice.--